CONTENTS

C O R R I G E N D A

Page	Column, Box & Line	Incorrect	Correct
37	Right C. 7th L. from bottom	without no friction	without friction
59	in Fig.	2.5 teeth	1.5 or 2.5 teeth
61, 70	16	CA9072 titled	CA9072 tilted
74	Right C. 2nd B. 3rd L.	by a 6V tester with	by a 3V tester with
77	Center C. bottom L.	0.7mm or more	0.4mm or more
95	3rd L. from bottom bottom L.	instead of V in 6 Defective Normal	instead of Ⓥ in ⑥ Normal Defective
104	Center C. bottom L.	Approx. 8mV--12mV	Approx. 8mA--12mA
108	Right C 1st L. Right C. 9th L.	Disconnect the black (2 wires of . . .	Disconnect the blue (2 index lines of ..
109	Center C. in Fig.	R305 R304	R306 R305
120	Center C. Fig.	Comedine 3000RS	Concave (die casting)
121	Left C. 3rd L. Center C. 1st L. Center C. Fig.	R306 R306 ↳ 2.4 KΩ	R305 R305 ↳ 68.3 KΩ
122	Left C. 2nd B. 6th L.	2.5 teeth	1.5 or 2.5 teeth
15 76, 92, 94, 98, 99, 102, 103, 104, etc.	3rd L. in Fig.	Off Set OFF set "	Offset " "

OLYMPUS
OM-2

OUTLINE OF REPAIRS

PRECAUTIONS FOR REPAIRS

The Model OM-2 is designed for very weak electricity in its electronic parts of the automatic exposure device so that it can measure and control an extremly low level of luminance (-5.5EV at ASA 100).

The electronic parts thus tend to be affected by static electricity or a voltage larger than that of the batteries used, and to suffer easily performance degradation or breakage due to the static electricity that a human body usually possesses. (The OM-2, however, is designed so as not cause such disadvantage in a completed state.)

Because of the above reason, if you should handle the OM-2 in the same way as with other cameras in repairs, the electric parts may be broken causing serious trouble that requires replacement of the shutter amplifier (M circuit board).

Take particularly the following cautions in repairs.

1. For the troubleshooting of the shutter amplifier and related mechanism, be sure to ground all materials that come into contact with the electronic parts including the human body, repair tools and work bench, and commence repair work after making sure the condition free from static electricity is achieved. (The ICs of MOS FET and IR024 are particularly delicate.)

2. For the soldering work, use a three-wire type soldering iron with the tip grounded.

3. The electronic parts are weak against heat. Thus, the soldering work must be made securely in a short time, 3 seconds for one place as a rule.

4. The shutter amplifier (M circuit board) requires very high insulation resistance on its every part, and must be kept free from dust, smudges, etc.

5. For the soldering of the shutter amplifier (M circuit board), use solder containing silver. If ordinary solder should be used, the silver in the circuit pattern may be absorbed by the solder causing unstuck soldering.

6. When a constant-voltage power supply is used in the shutter amplifier (M circuit board) repair work, do not turn on and off the main switch of the power supply leaving it connected to the M circuit board. Back electromotive force may break the electronic parts.

7. When a continuity test is made in the shutter amplifier (M circuit board) repair work, avoid to use the 3V tester for the case other than specified in the OUTLINE OF REPAIRS. The electronic parts may be broken.

8. For other cautions, see each item in the OUTLINE OF REPAIRS.

OLYMPUS
OM-2

PARTS LIST & DRAWING

EXPLANATORY NOTES ON VARIOUS MARKS & NUMBERS USED IN IMPROVED PARTS TABLE & PARTS LIST

★ Only Body Die-Cast is not available in case of overseas.

● An assembled parts is supplied including parts marked with ①

① Single parts is supplied.

( ) Not to be supplied in single parts, but as an assembled parts.

↺ Left-handed screw. (the mate screw hole is not marked particularly). All right-handed screws have no special indication.

< > Improved parts. Number shows INDEX in IMPROVED PARTS TABLE where more details are explained.

═══ No more available parts.

⇨ The place where parts have been improved.

[ ] Dimensions of improved parts and improved points.

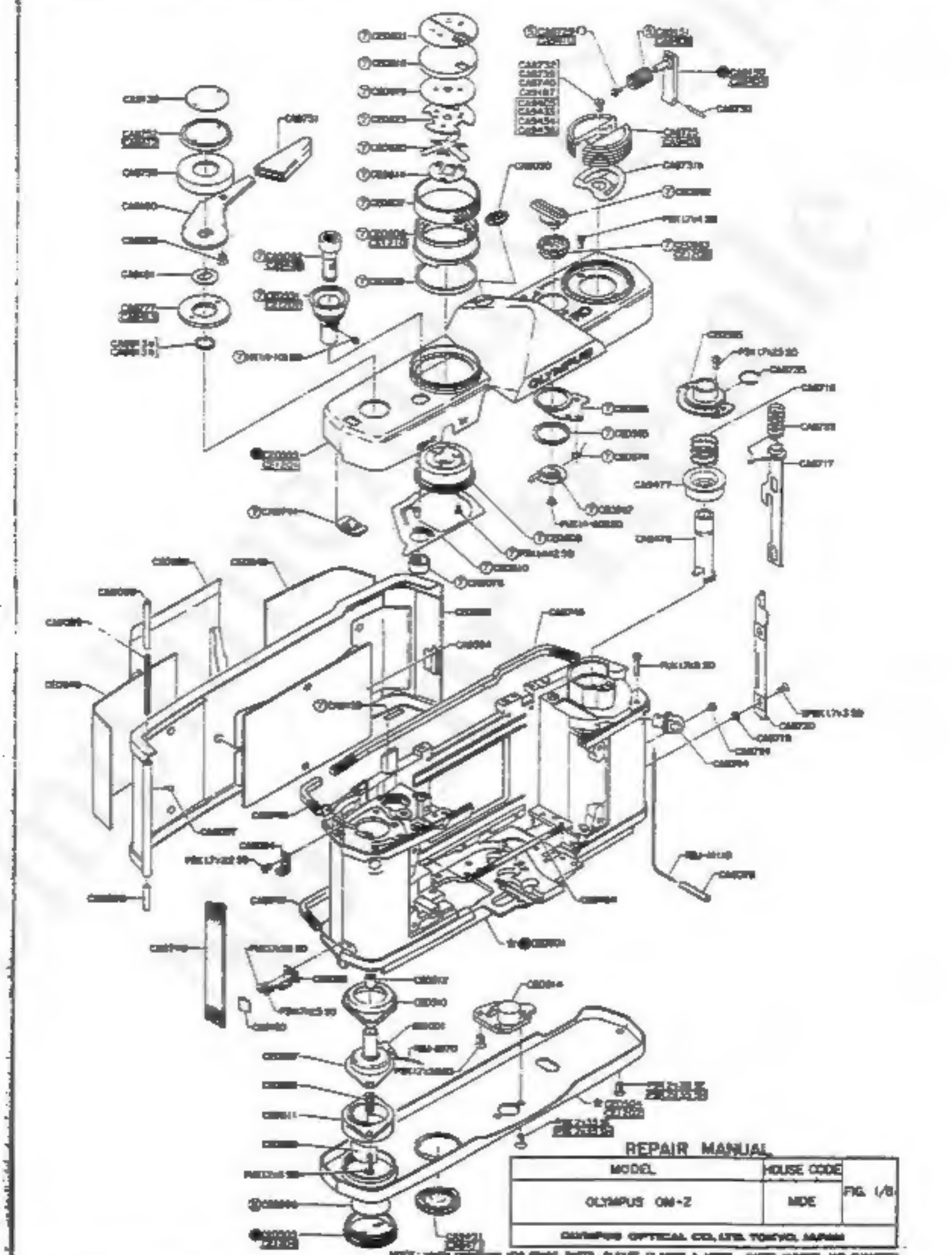
♡♤◇♧ Replacing parts of no more available parts marked with ═══.

※ How to replace parts or how to repair.

——— Original parts are also usable instead of improved parts.

✕ Printing error. No parts are built-in cameras.

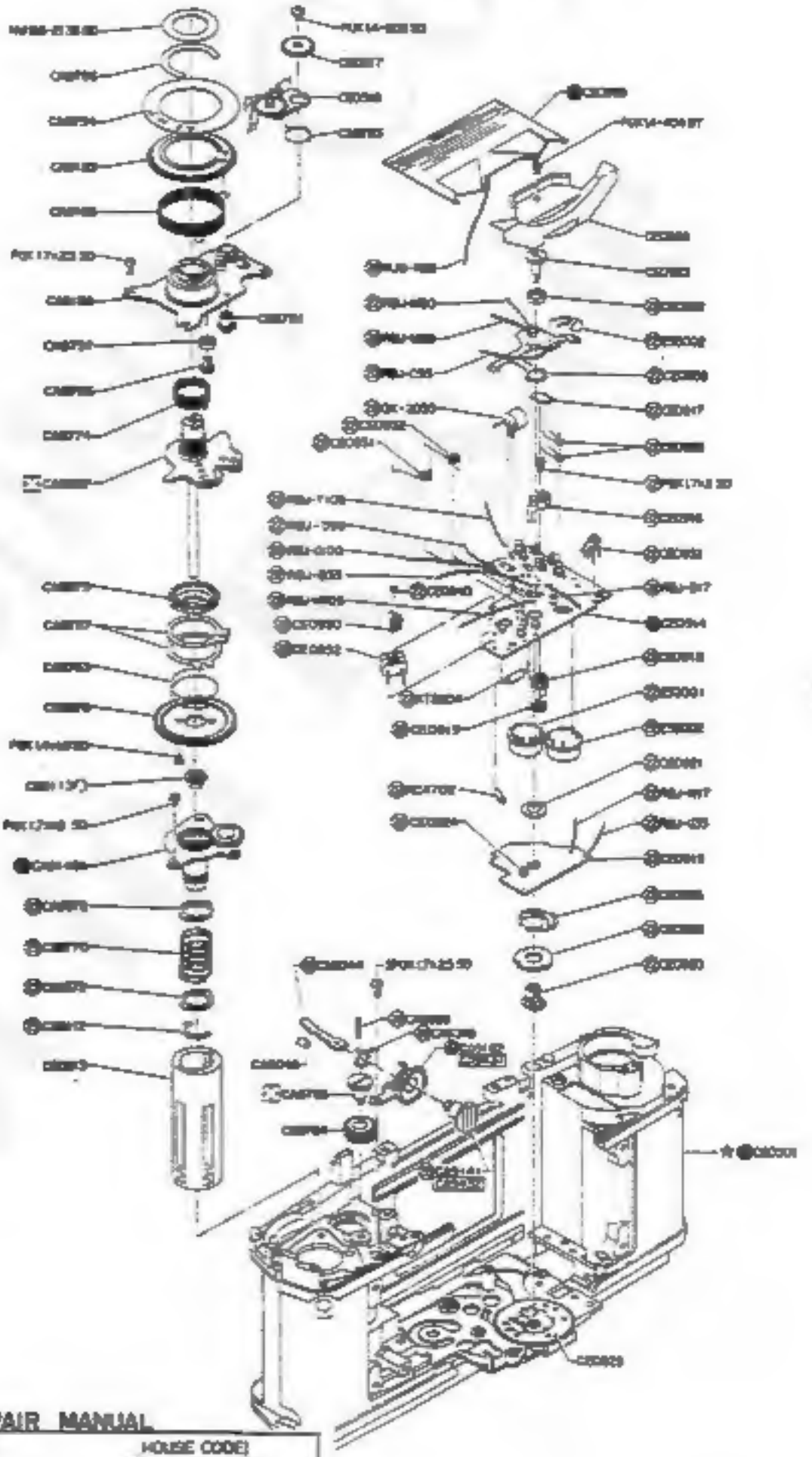
Clarify HOUSE CODE, PARTS NUMBER and QUANTITY in your ORDER SHEETS.



REPAIR MANUAL

MODEL	HOUSE CODE	FIG. 1/8
OLYMPUS OM-2	MDE	
OLYMPUS OPTICAL CO.,LTD. TOKYO, JAPAN		

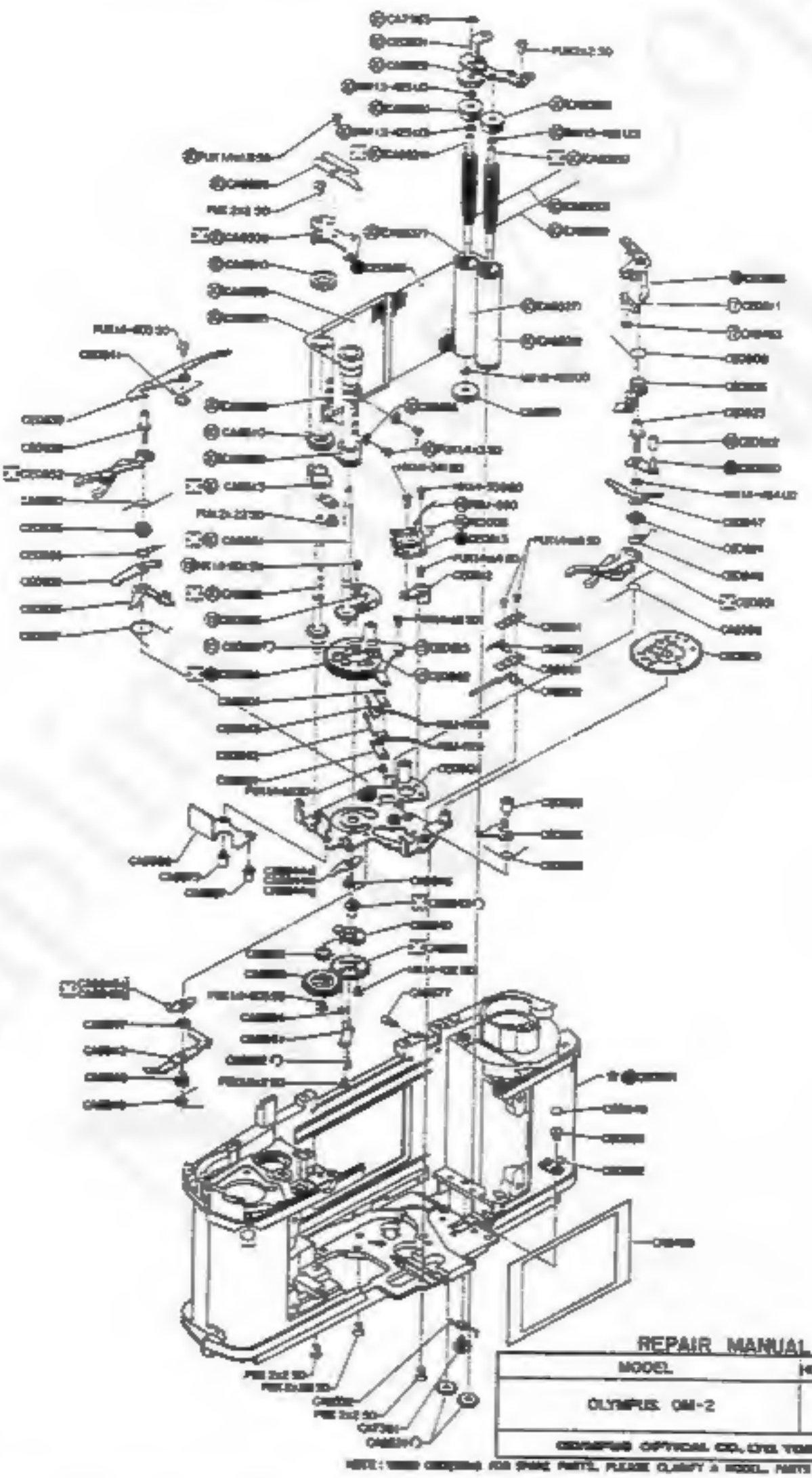
NOTE: WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY.



REPAIR MANUAL

MODEL	HOUSE CODE	
OLYMPUS OM-2	MDE	FIG. 2/8
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

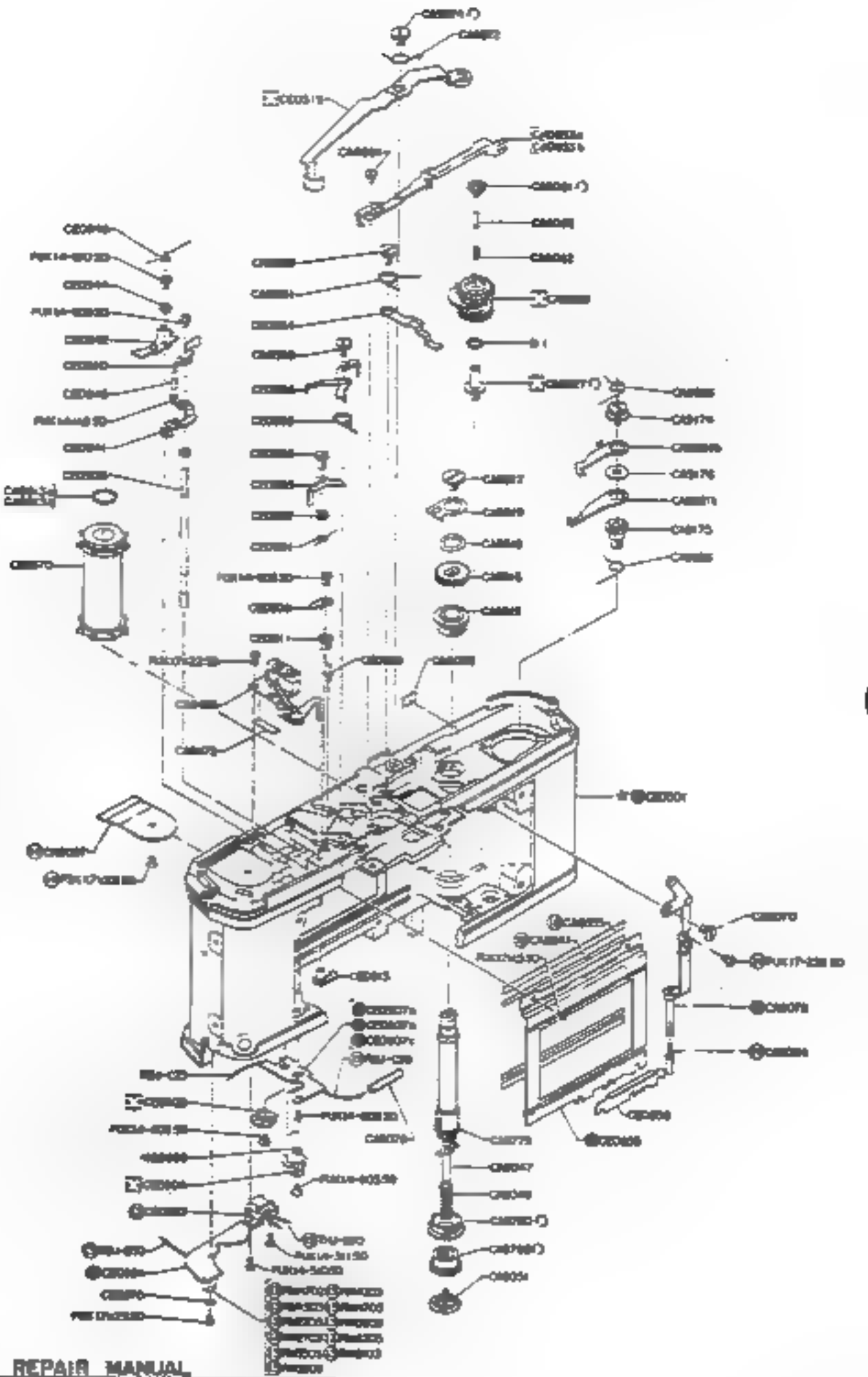
NOTE : WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY.



REPAIR MANUAL

MODEL	HOUSE CODE	
OLYMPUS OM-2	MDE	FIG. 3/5
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

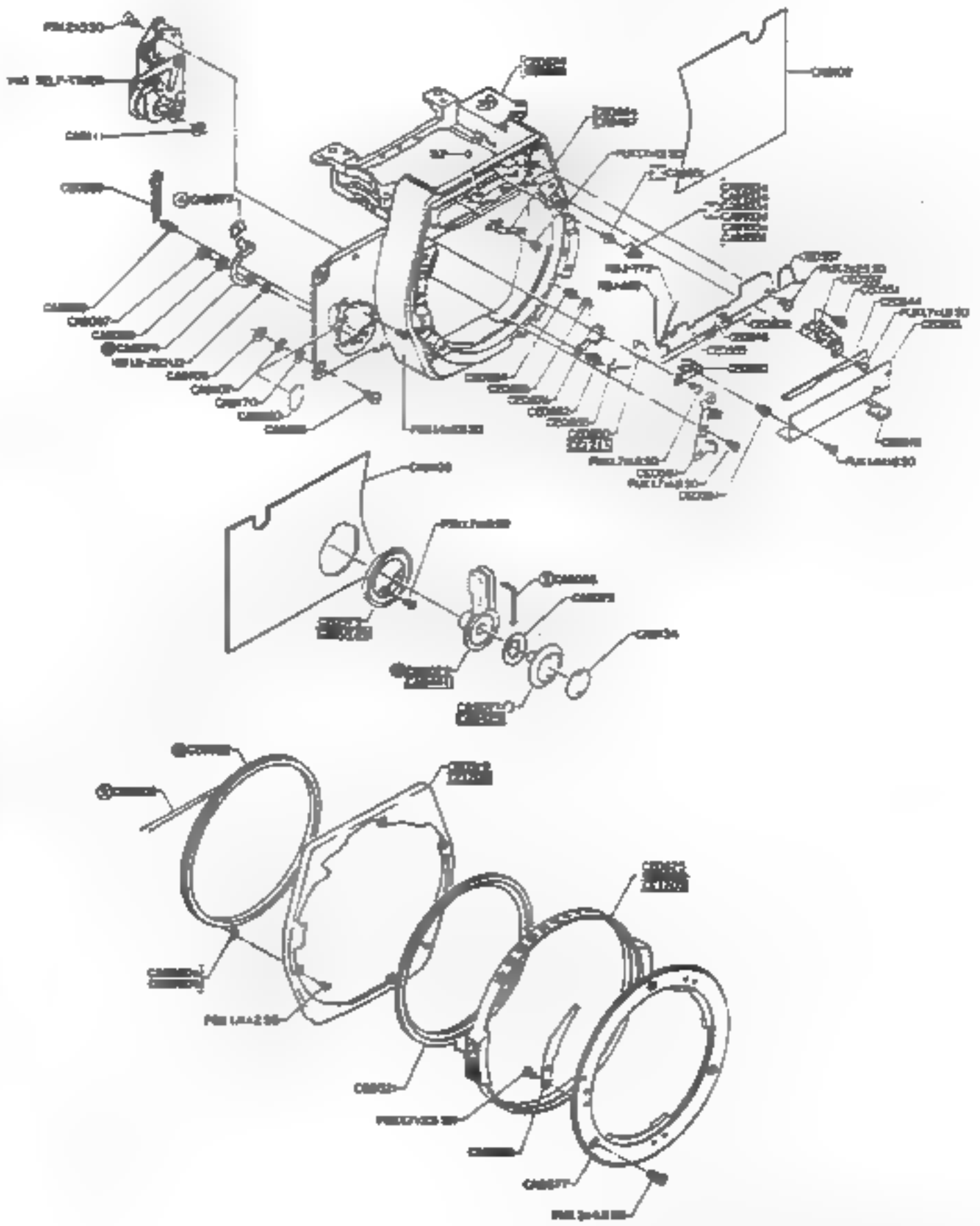
NOTE: WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY.



REPAIR MANUAL

MODEL	HOUSE CODE	
OLYMPUS OM-2	MDE	FIG. 4/6
[illegible]		

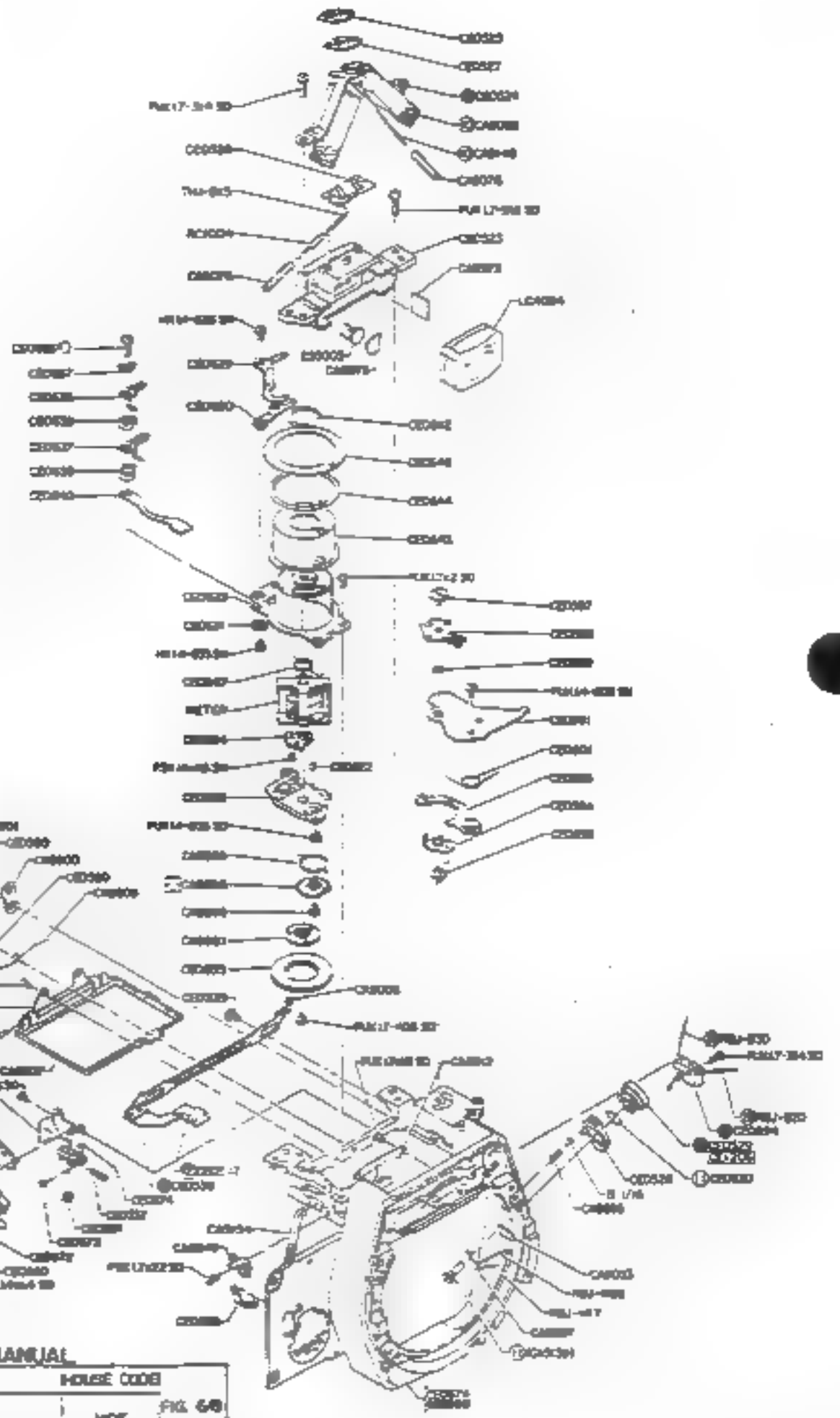
NOTE: [illegible]



REPAIR MANUAL

MODEL	HOUSE CODE	FIG. 5/6
OLYMPUS OM-2	MDE	
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

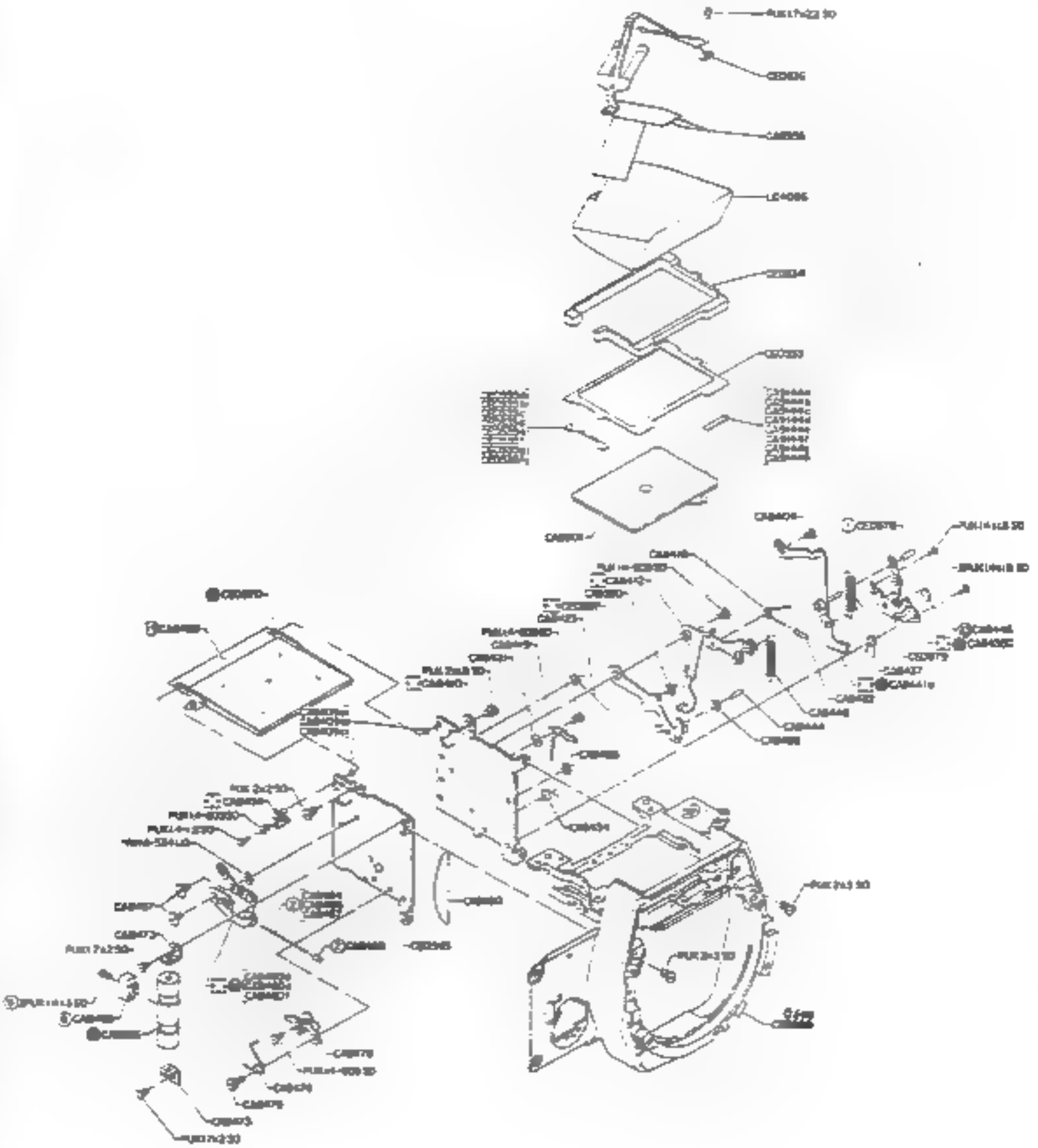
NOTE: WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY.



REPAIR MANUAL

MODEL	HOUSE CODE	
OLYMPUS OM-2	MOE	FIG. 6/8
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

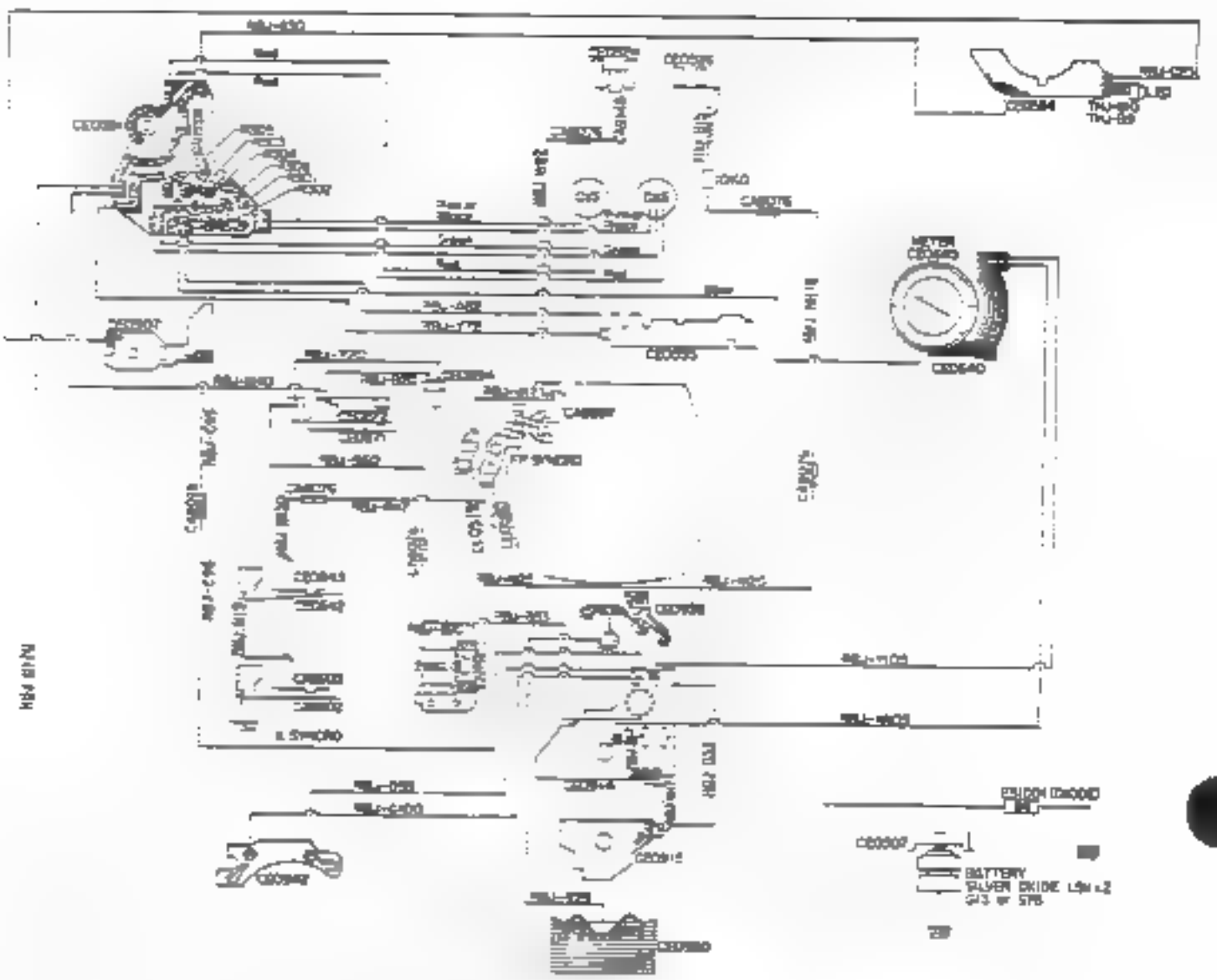
NOTE: WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY.

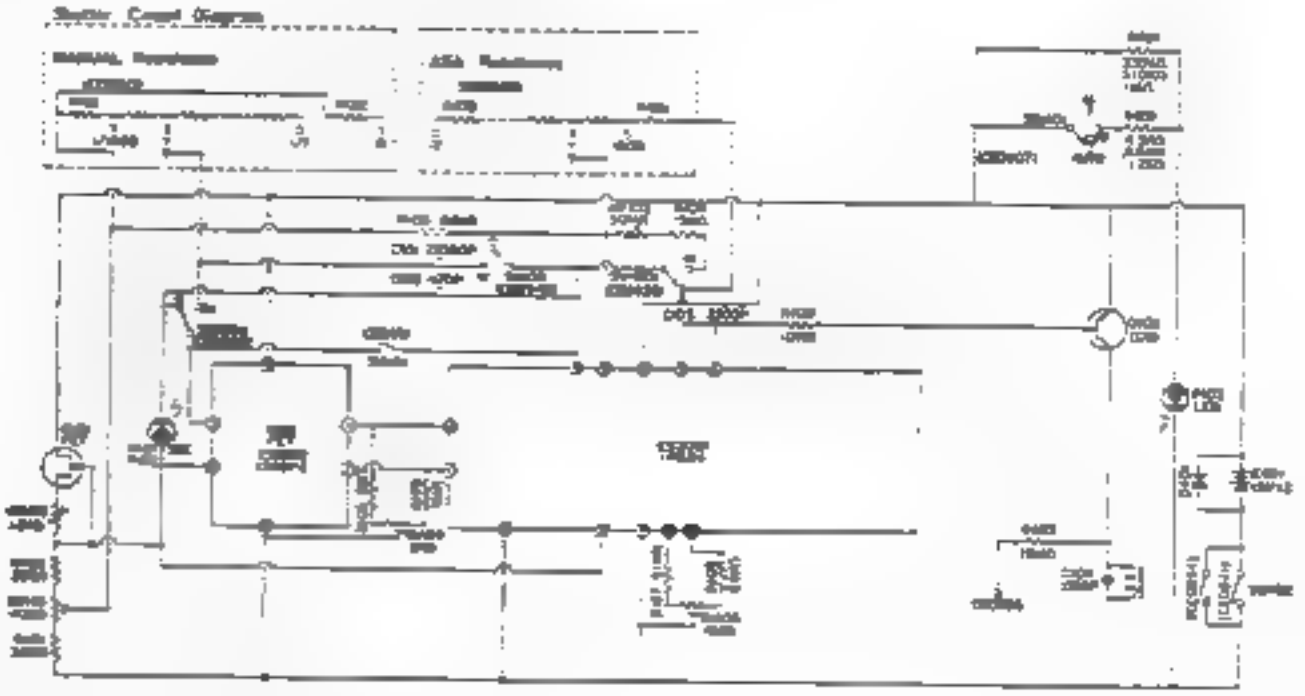


REPAIR MANUAL

MODEL	HOUSE CODE	FIG. 7/8
OLYMPUS OM-2	MOE	
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

NOTE: WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY.





REPAIR MANUAL

MODEL	HOUSE CODE	
OLYMPUS OM-2	MDE	FIG. 6/6
OLYMPUS OPTICAL CO.,LTD. TOKYO, JAPAN		

NOTE: WHEN ORDERING FOR SPARE PARTS, PLEASE CLARIFY A MODEL, PARTS NUMBER AND QUANTITY

PARTS NO.	NAME OF PARTS
CA 7381	STOPPER SCREW
7963	RING E
8076	TUBE
8404	M LEVER SCREW
8409a	ADJUSTING WASHER a
8409b	ADJUSTING WASHER b
8409c	ADJUSTING WASHER c
8410	LEFT SIDE PLATE
8412	M CHARGING LEVER
8418	STOPPER SPRING
8419	M HOOKING LEVER
8421	HOOKING LEVER SPRING
8422	TUBE 2
8423	RETURNING SPRING
8434	HOOK SPRING
8435c	M BASE PLATE c
8437	MS SPRING
8441b	M LEVER b
8446	M RING
8448	CONNECTING LEVER SPRING
8454	M PIVOT
8457	LEVER SHAFT
8460d	LINK d
8460e	LINK e
8460f	LINK f
8463	E RING 08
8464	SPRING 1
8466	SPRING 2
8467	SPRING 3
8468	SPRING COVER
8469	PIPE CONNECTOR
8473	PIPE HOLDER (UPPER)
8476	■ POSITIONING SPRING
8478	M POSITIONING PLATE
8479	M POSITIONING SHAFT
8483	LIGHT PROOF PLATE
8490	RIGHT COVERING PLATE
8499	B MASK
8508	CURTAIN BASE R
8510	ROLLER A
8513	ROLLER HOLDER
8529	ROLLER B
8531	TENSION NUT
8532	TENSION NUT STOPPER
8535	FELT B
8541	FELT A

PARTS NO.	NAME OF PARTS
CA 8586	A LEVER SPRING
8590	B LEVER SPRING
8598	S LEVER WASHER
8601	STOPPER PLATE
8602	"X" SYNCHRO CONTACT POINT
8603	"FX" SYNCHRO CONTACT POINT
8661	TUBE SHAFT A
8662	TUBE SHAFT B
8666	ADJUSTING WASHER
8716	R COLLAR SPRING
8717	KEY A
8719	KEY COLLAR
8720	KEY COVER
8722	KEY SPRING
8724	KEY POSITIONING SCREW
8725	R KNOB
8729	R PINCH SET SCREW
8730	R LEVER PIN
8731	R LEVER SPRING
8732	R LEVER WASHER
8735	R SPRING
8739	■ LEVER WASHER 2
8740	R LEVER STOPPER 3
8741	FILM COUNTER COVER
8744	STRAP EYELET
8745	LIGHT PROOF L
8746	LIGHT PROOF R
8747	LIGHT PROOF (LOWER)
8748	LIGHT PROOF (SIDE)
8751	FW LEVER COVER
8752	FW LEVER HOLDER
8753	FW LEVER DECORATION
8757	F PLATE
8763	F SPRING
8764	ST IDLE
8765	IDLE SHAFT
8770	SPOOL SPRING
8774	FW SPRING
8777	FASTENING RING
8778	FC RETURNING LEVER
8779	ST SHAFT
8780	SPROCKET HOLDER (UPPER)
8781	FC GEAR SHAFT
8783	FC RETURNING SPRING
8786	C RING
8788	ST GEAR
8794	FC PLATE

PARTS NO.	NAME OF PARTS
CA 8796	L STOPPER
8797	WASHER (RUBBER)
8806	FW LEVER COVER STOPPER
8813a	WASHER 1a
8813b	WASHER 1b
8815	SPROCKET HOLDER (LOWER)
8816	GEAR #1
8817	GEAR #1 SCREW
8818	GEAR #1 SPRING
8819	K CLAW
8821b	CHECKING LEVER ■
8824b	LOCK LEVER b
8826	LOCK SPRING
8827	SHAFT #2
8828	GEAR #2 SHAFT
8836	GEAR #3
8839	GEAR #4
8840	S WINDING PLATE
8841	GEAR #4 BASE
8842	KS LEVER
8843	SHAFT #4
8844a	LEVER 1a
8844b	LEVER 1b
8844c	LEVER 1c
8845a	LEVER #2a
8845b	LEVER #2b
8846	LEVER STOPPER
8847	KS HOLDER
8848	KS SHAFT
8849	KS SPRING
8851	GEAR #3 SPRING
8852	SHAFT #4 SCREW
8854	S RING
8857	BASE PLATE SHAFT
8859	BULB PLATE SCREW
8861	RETURNING SPRING
8864	KL SHAFT
8872	KM SPRING
8877	B MOUNT
8888	B MOUNT SPRING
8897	FP SYNCHRO CONTACT POINT
8899	FX SYNCHRO CONTACT SPRING
8900	INSULATING PLATE
8901	INSULATING PLATE
8907	F FRAME
8909	F SPRING
8911	F SHAFT
3912	F LOCK SCREW

PARTS NO.	NAME OF PARTS
CA 8915	DAMPER #2
8931	PULLEY SHAFT
8933a	RETURNING ROLLER a
8933b	RETURNING ROLLER b
8933c	RETURNING ROLLER c
8933d	RETURNING ROLLER d
8933e	RETURNING ROLLER e
8933f	RETURNING ROLLER f
8936	P COVER
8939	B SPRING SHAFT
8941	F HINGE
8949	B SPRING PLATE
8950	COVERING PLATE
8960a	COVERING PLATE WASHER a
8960b	COVERING PLATE WASHER b
8969	STOPPER 61
8973	C LIGHT PROOF
8975	C COVER
8981	M PULLEY HOLDER
8996	M LOWER PLATE GEAR
8998	GEAR SHAFT
8999	GEAR SPRING
9008	PULLEY SCREW
9030	T NUT
9037	P PLATE
9044	K INNER PLATE
9045	K LEVER SPRING
9046	K PLATE HOLDER
9047	ST CLAW
9049	ST SPRING
9051	ST SCREW
9053	LEVER CUSHION
9061	ME GUIDE
9062	COVER SPRING
9063	COVER PIN
9070	■ SCREW
9071	■ LEVER STOPPER
9072	ST LEVER
9074	START LEVER
9075	F SPRING
9076	RELEASE BASE NUT
9077	START LEVER CAP
9078	S RELEASE PLATE
9082	S RELEASE BUTTON
9084	SR BUTTON SHAFT
9086	S LEVER PLATE
9087	D SCREW
9088	W SPRING

PARTS NO.	NAME OF PARTS
CA 9092	SM COVER
9093	SR BUTTON WASHER
9094	HINGE PIN HOLDER (UPPER)
9095	HINGE PIN HOLDER (LOWER)
9097	HINGE PIN SCREW
9098	HINGE PIN A
9099	HINGE PIN B
9100	COVERING PLATE
9102	LEFT SIDE LEATHER
9103	RIGHT SIDE LEATHER
9106	ADJUSTING WASHER NO. 1
9107	ADJUSTING WASHER NO. 2
9111	ST WASHER
9112	C WASHER
9113	GEAR FASTENER
9134	COVERING PLATE NO. 1
9135	COVERING PLATE NO. 2
9141	K PINCH
9144a	FRONT ADJUSTING PLATE a
9144b	FRONT ADJUSTING PLATE b
9144c	FRONT ADJUSTING PLATE c
9144d	FRONT ADJUSTING PLATE d
9144e	FRONT ADJUSTING PLATE e
9144f	FRONT ADJUSTING PLATE f
9144g	FRONT ADJUSTING PLATE g
9144h	FRONT ADJUSTING PLATE h
9146b	SPOOL SHAFT ■
9148	LEAD WIRE (45mm long, BLACK)
9150	■ LEVER
9151	R PINCH
9154	LIGHT PROOF PADDING (UPPER)
9155	FRONT CASTING SET SCREW
9156	LIGHT PROOF PADDING M
9162	K BASE PLATE
9170	ADJUSTING WASHER 3
9174	LEVER SHAFT
9175	M HOLDER
9176	LEVER SHAFT WASHER
9180	FILM WINDING LEVER
9181	LEVER WASHER
9183	FILM COUNTER GEAR
9185	COUNTER SPRING
9186	FC BASE PLATE
9187	R LEVER WASHER
9192	ADJUSTING PLATE
9370	SPROCKET
9372	SPOOL HOLDER
9374	M LEVER SHAFT
CA 9375	FW LC
9376	FW GEAR
9377	FILM GUIDE SCREW
9378	(COVERING PLATE NO. 3)
9379	3G HOOK SCREW
9380	LEVER COLLAR (RUBBER)
9385	A PIPE
9387	FW SHAFT
9388	STOPPER PLATE (UPPER)
9389	STOPPER PLATE (LOWER)
9394	PRESSURE PLATE
9444	TUBE 3
9451	M COVER
9472	SW WASHER
9476	R SHAFT
9477	R COLLAR
9483	SW BASE PLATE
9487	CLICK SPRING
9488	RUBBER RING 3
9494	FELT ■
9501	FOCUSING SCREW
CE 0501	(DIE CAST BODY)
0502	FRONT CASTING
0503	TOP COVER
0504	BOTTOM PLATE
0505	BATTERY COMPARTMENT LID
0506	COVERING SEAL
0507	B COVER
0509	B CONTACT POINT
0510	INSULATION COVER
0511	B HOUSING
0512	COLLAR
0513	SPOOL B
0514	TRIPOD BASE
0515	KM LEVER
0516	FC RETURNING LEVER
0517	FC GEAR
0519	FRONT COVERING PLATE
0520	SHUTTER DIAL
0521	DIAL GEAR
0522	CONNECTING RING
0523	S FRAME
0524	S BASE
0525	S INSULATING WASHER
0526	S CONTACT POINT
0527a	■ WASHER a
0527b	T WASHER ■

PARTS NO.	NAME OF PARTS	PARTS NO.	NAME OF PARTS
CE 0528	FX SINCHRO KNOB	CE 0587	SLIDE SCREW
0529	SINCHRO SOCKET	0588	SLIDE PLATE
0530	P STOPPER SPRING	0589	SLIDE HOLDER
0531	BUTTON COVER	0591	SW CIRCUIT BOARD
0532	FP SCREW	0593	CAM SHAFT
0533	MASK	0594	CAM S
0534	PRISM WASHER	0595	CHENGE LEVER
0535a	REAR ADJUSTING PLATE a	0601	RETURNING SPRING
0535b	REAR ADJUSTING PLATE b	0602	B STRING 1
0535c	REAR ADJUSTING PLATE c	0603	B STRING 2
0535d	REAR ADJUSTING PLATE d	0604	SPRING HOLDER
0535e	REAR ADJUSTING PLATE e	0606	A DIAL
0535f	REAR ADJUSTING PLATE f	0607	RUBBER RING
0535g	REAR ADJUSTING PLATE g	0608	CLICK RING
0535h	REAR ADJUSTING PLATE h	0609	L NUT
0536	P STOPPER	0610	LOCK SPRING
0537	CONNECTING LEVER	0614	CAM SPRING
0538	SLIDER	0618	A CAP
0539	SL SHAFT	0619	A PLATE
0543	RIGHT SIDE PLATE	0620	MK PLATE
0544	GUIDE PLATE	0621	EV PLATE
0546	SL CONTACT	0622	INSULATION SHAFT
0547	INDICATION PLATE	0623	COVERING PLATE
0550	ROLLER	0624	M GEAR 2
0551	ROLLER SCREW	0625	M BASE
0552	RIGHT SIDE PLATE	0626	M LOWER PLATE
0553	COVERING PLATE	0629	A LEVER 1
0555	CIRCUIT BOARD B	0630	A LEVER 2
0557	SPRING	0631	WASHER
0559	B SPRING	0635	PULLEY M
0560	F SPRING SHAFT	0636	A CONTACT 1
0561	STOPPER	0637	A CONTACT 2
0562	S LEVER	0638	CONTACT BASE 1
0563	SW WASHER	0639	CONTACT BASE 2
0565	NUT	0640	BASE PLATE A
0566	C BASE PLATE	0642	C WASHER
0567	K LEVER	0643	A CAM
0570	INSULATING WASHER	0644	WASHER
0574	C SPRING	0645	AR BASE PLATE
0575	S BASE COVER	0647	ST SPRING
0578	SR TUBE	0648	REAR RIGHT SIDE LEATHER
0579	F CONTACT (UPPER)	0649	REAR RIGHT SIDE LEATHER
0580	F CONTACT (LOWER)	0650	RESET BUTTON
0581	F NUT	0652	HOOK SHAFT
0582	F SCREW	0653	HOOK SPRING
0583	CL HOUSE	0654	BL SPRING HOLDER
0584	C CIRCUIT BOARD	0655	BL SPRING
0585	R SHAFT HOLDER	0656	REAR COVER ASS'Y

PARTS NO.	NAME OF PARTS	PARTS NO.	NAME OF PARTS
CE 0658	HOLDING SPRING	CE 0863	CURTAIN ASS'Y
0659	LIGHT PROOF PADDING (LOWER)	0864	GEAR AB
0660	B NAME PLATE	0865	GEAR PLATE B
0663	SL INSULATING PLATE	0866	REAR CLAW A
0664	CLICK SPRING	0870	M FRAME
0665	INSULATION PLATE	0871	M CONTACT 1
0666	A SCREW	0872	M CONTACT 2
0667	INSULATION PLATE	0874	M INNER PLATE
0674	FRONT CASTING	0875	M TUBE
0675	■ DIAL	0879	M SPRING
0676	BL LEVER	0882	M RELEASE
0801	S BASE PLATE	0883	MR SHAFT
0805	HOOK LEVER	0885	TURN PLATE A
0808	SPRING A	0886	TURN PLATE B
0811	HOLDING PLATE	0887	TURN COLLAR
0812	MG BASE	0888	TURN SCREW
0813	MG PLATE	0889	SPRING STOPPER
0819	SPRING B	0891	TURN SPRING A
0820	TR PLATE	0892	TURN SPRING B
0822	T TUBE	0894	M2 WASHER
0823	REAR SHAFT	0901	PLATE L
0824	REAR NUT	0902	C CAM
0825	S PLATE (UPPER)	0904	C LEVER
0826	B LEVER	0906	C SHAFT
0828	B SPRING	0907a	C BASE a
0829	SPEED GEAR	0907b	C BASE b
0832	FIRST CLAW A	0907c	C BASE ■
0833	FIRST CLAW ■	0909	C PLATE 1
0835	FIRST SHAFT	0910	C PLATE 2
0836	FIRST SPRING A	0911	C BOSS
0837	FIRST SPRING B	0913	C PLATE 3
0838	B LEVER SCREW	0914	M CURCUIT BOARD
0839	M LEVER	0915	■ CURCUIT BOARD
0841	M SPRING	0916	CAM SHAFT
0842	X CONTACT A	0917	PLASTIC CAP
0843	X CONTACT B	0918	CAM NUT
0847	LOCK LEVER	0919	C SPRING 2
0848	SL LEVER	0920	BASE TUBE
0851	A LEVER 2	0921	INSULATING PLATE
0852	B LEVER 2	0922	PLASTIC NUT
0853a	KL PLATE a	0923	SCREW
0853b	KL PLATE ■	0924	STOPPER
0854	B PLATE	0925	SPEED PLATE
0855	F MASK	0926	POSITION NUT
0856	MASK STOPPER	0928	B SCREW
0860	STOPPER PLATE	0930	T FASTENER
0861	GEAR SCREW	0931	T CONTACT A
0862	B STOPPER RING	0932	T CONTACT B

PARTS LIST

PARTS NO.	NAME OF PARTS
CE 0935	K CONTACT
0938	SUB CIRCUIT BOARD
0940	STOPPER
0941	C BASE PLATE
0942	C BASE
0944	C COLLAR
0945	C TUBE
0946	C SPRING 3
0949	RM PLATE
0952	L BASE
0955	COVERING PLATE
0956	LOWER COVER
LC 4084	EYE PIECE LENS
4086	PENTAPRISM
	EXPOSURE METER ASS'Y
V 40	SELF TIMER
ES 1001	DIODE
2001	IR-024
2002	IS-001Z
5002	L E D
5003	C d S
QK 2030	F E T
	CONDENSER
	KC 1003
	KC 4702
	KT 2204
	RESISTOR
	RC 1004
	RC 7174
	RM 1004
	1005
	1104
	1204
	1304
	1404
	1503
	1504
	1604

PARTS NO.	NAME OF PARTS
	RESISTOR
	RM 1704
	1804
	1805
	1904
	2004
	2203
	2204
	2304
	2403
	2404
	2504
	2604
	2703
	2704
	2705
	2804
	2904
	3004
	3104
	3204
	3303
	3304
	3404
	3504
	3604
	3903
	4303
	4702
	4703
	4705
	5103
	5603
	6203
	9103
	LEAD COIL
RBJ-A82	Blue
-B17	Black
-B20	Black
-B30	Black
-B33	Black
-B40	Black
-B60	Black
-B90	Black
-B170	Black

PARTS NO.	NAME OF PARTS
	LEAD COIL
RBJ-C25	Brown
-C95	Brown
-D95	Orange
-G100	Green
-M20	Purple
-M25	Purple
-M118	Purple
-R19	Red
-R25	Red
-R47	Red
-R130	Red
-G33	Green
-W17	White
-W82	White
-W105	White
-Y20	Yellow
-Y25	Yellow
-Y72	Yellow
-Y105	Yellow
	TUBE
THJ-B9	Black
-B10	Black
-B18	Black
	SET SCREW
	PUK1.4x 1.4SO
	PUK1.4x 1.6SO
	PUK1.4x 1.8SO
	PUK1.4x 3 SO
	PUK1.4-310SO
	PUK1.4-311SO
	PUK1.4-404ST
	PUK1.4-605SO
	PUK1.4-605SN
	PUK1.4-609SO
	PUK1.4-610SO
	PUK1.7x 1.5SO
	PUK1.7x 1.6SO
	PUK1.7x 1.8SO
	PUK1.7x 2 SO
	PUK1.7x 2.2SO
	PUK1.7x 2.5SO

PARTS NO.	NAME OF PARTS
	SET SCREW
	PUK1.7x 2.5SN
	PUK1.7x 5 SN
	PUK1.7x 8 SO
	PUK1.7-236SO
	PUK1.7-314SO
	PUK1.7-406SO
	PUK1.7-516SO
	PUK2x1.8SO
	PUK2x2 SO
	PUK2x2.2SO
	PUK2x2.5SO
	PUK2x3 SO
	PUK2x4.5SG
	PSK1.4x1.6SO
	PSK1.4x1.6SN
	PSK1.4x2 SO
	PSK1.4x2.5SO
	PSK1.7x1.8SO
	PSK1.7x2.2SO
	PSK1.7x2.5SO
	PSK1.7x2.5SB
	PSK1.7x3 SO
	PSK1.7x3.5SO
	PSK1.7x4 SB
	PSK2x2 SO
	PSK2x2.2SO
	PSK2x2.8SO
	PSK2x3 SO
	PSK2x3.5SE
	3PUK1.4x1.8SO
	3PUK1.4x3 SO
	3PUK1.7x2.5SO
	3PUK1.7x5 SN
	3PUK1.7x3 SO
	BALL
	B 1
	B 1/16
	B 2

PARTS NO.	NAME OF PARTS
	SET SCREW
	HK1.4-101BO
	HK1.4-102BO
	HK1.4-201SN
	HK1.4-338BO
	HK1.4-341BO
	HK1.4-633SN
	WASHER
	NW1.4-334UO
	NW1.4-434UO
	NW1.5-425UO
	NW1.8-230UO
	NW1.8-325BO
	NW2.1-240PO
	NW8.6-213680

PARTS NO.	NAME OF PARTS
	BLACK FINISH
CA 9073b	S BASE COVER
9403	R KNOB
9404	R LEVER
9405	R LEVER WASHER
9408	R PINCH
9410	R PINCH SCREW
9412	LEVER FASTENER
9413	FASTENER
9425	S LEVER STOPPER
9426	SR BUTTON
9431	KT HOLDER
9432	K PINCH
9433	R LEVER WASHER
9434	R LEVER WASHER
9436	R LEVER WASHER
9441	ST LEVER B
9471	M CAP
CE 1201	TOP COVER
1202	BOTTOM PLATE
1203	FRONT CASTING
1204	B COMPARTMENT LID
1205	SHUTTER DIAL
1206	SYNCHRO SOCKET
1207	BUTTON WASHER
1208	SW WASHER
1210	A DIAL
1211	RESET BUTTON
	SET SCREW
	PSK 2x3.5 SB

OLYMPUS
OM-2

GENERAL OUTLINE AND MECHANICAL FEATURES

GENERAL OUTLINE AND MECHANICAL FEATURES

1. GENERAL OUTLINES

HOUSE CORD: MDE

MODEL NAME: OM-2

2. MAIN SPECIFICATIONS

System: OLYMPUS OM System

Camera type: 35mm Single Lens Reflex with automatic exposure control electronic focal plane shutter.

Film format: 24mm x 36mm.

Lens mount: OLYMPUS OM Mount, bayonet type; rotation angle 70°, flange back 46mm.

Shutter: Focal plane shutter, automatic exposure control from several tens of seconds to 1/1,000 second (ASA 100, F1.2, at normal temperature and humidity). Manual exposure: B, 1-1/1,000 sec., ring mounted control.

Synch.: FP.X switch type contact, incorrect flash prevention.

Automatic exposure control: Aperture-preferred automatic exposure control electronic shutter type. TTL Direct Light Measuring System, center-weighted for bright, and averaging for dark conditions. Measuring range: ASA 100 F1.2 from several tens of seconds to F16, 1/1,000 seconds, (about EV-5.5 - EV 18) (at normal temperature and humidity). Light sensors: 2 SBC sensors. Large fine-exposure adjustment dial: ±2EV (within the ASA film speed range). Automatic flash exposure: Direct contacts for TTL Auto Flash.

Manual exposure: TTL type. Measuring system: Full aperture center-weighted metering. Measuring range: EV1.5 - EV17 (ASA 100 with F1.2 standard lens). Light sensors: ■ CdS sensors.
Zero-method with needle visible in viewfinder.

Film speed setting: ASA 12 — 1600, set by lifting and rotating film speed dial.

Auto/Manual selection: By switching lever.

Battery check: 3-stage battery check lamp (light emitting diode) indicates full voltage, depleted charge, and exhaustion of batteries. Shutter lock to limit drainage.

Power source: Two 1.5V silver oxide batteries (Eveready (or UCAR) S-76 or equivalents).

Viewfinder: Pentaprism type wide-vision finder.

Focusing screens: Wide selection of interchangeable screens. Standard type Focusing Screen 1-1 (microprism-matte type).

Finder view-field: 97% of actual picture field.

Apparent field view: Vertical 23°30', horizontal 35°.

Indicators in: 3-stage selector lever. (Auto: Shutter speed indicator. — Manual: exposure index. — Off: nothing).

Reflex mirror: Oversize. quick return type (without lock-up).

Film loading: OLYMPUS easy loading.

Manual film advance: Lever type with 150° angle for one long or several short strokes, pre-advance angle 30°, self cocking, double advance and double exposure prevention.

Motor drive: With Motor Drive 1 unit attached, single frame and continuous advance at speed of 5-frame per second (at exposures above 1/500 sec., with fresh batteries and at normal temperature and humidity).

Exposure counter: Progressive type with automatic reset.

Film rewind: Crank type. with rewind clutch setting, automatic return.

Self-timer: 4 - 12 second delay lever type with 180° maximum angle. stopped and reset after actuation.

Camera back: Removable hinge type. with memo holder. Interchangeable with Recordata Back 1 and 250 Film Back 1.

Hot shoe socket: OLYMPUS accessory shoe (optional) attachable.

Dimensions and weights:

Body only:	136 x 83 x 50mm (5.35" x 3.27" x 1.97")	520g	(18.3 oz)
With F1.8 lens:	136 x 83 x 81mm (5.35" x 3.27" x 3.19")	690g	(24.3 oz)
With F1.4 lens:	136 x 83 x 86mm (5.35" x 3.27" x 3.39")	750g	(26.5 oz)
With F1.2 lens:	136 x 83 x 97mm (5.35" x 3.27" x 3.82")	830g	(29.3 oz)

3. CAUTION

AUTO: At "AUTO", the shutter speed varies automatically in response to the f/stop preselected and lighting conditions regardless of the shutter dial setting, except "B".

To release the shutter lock: When the shutter is locked due to improper battery condition, the lock can be released by resetting the shutter dial. (Align the reset marks, * and arrow, while depressing the reset button. At this point, the shutter dial is set to "B".)

When trouble occured: If the shutter is locked, the battery shall be depleted quickly. Therefore, release the lock immediately.

4. MECHANICAL FEATURES

CONTENTS

[1] **WX Mechanism (Prevention of flashing at 1/125 sec. and faster)**

The mechanism, in which the X contact is not turned on for the shutter speeds faster than 1/125 of a second, is called "WX mechanism".

The principle lies in the structure comprising two contact pieces; X_2 coupling with opening curtain and X_1 coupling with closing curtain, wired in series each other. When the shutter is charged, the contact piece X_2 is OFF, while X_1 is ON.

1/60 sec. or slower ----- When the opening curtain fully run, X_2 is turned ON; at this point, the closing curtain doesn't start for a certain time (X_1 remains ON). Both contacts are thus ON at the same time.

1/125 sec. or faster ----- The closing curtain runs before X_2 is turned on. (X_1 is OFF.) Both contacts are thus OFF at the same time.

[2] Shutter Lock and Lock Release

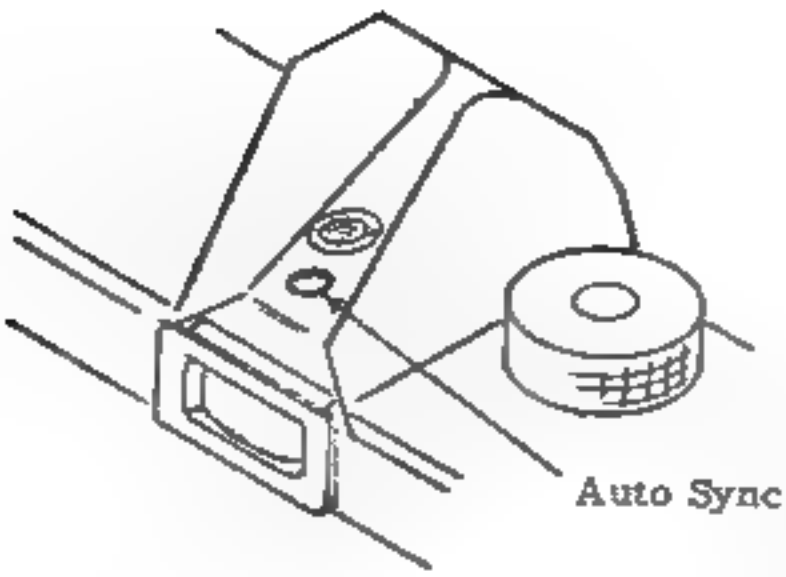
When the shutter cannot operate due to battery voltage drop and other battery troubles, the shutter lock is activated and the mirror is locked up midway. To return the mirror to the original position, turn the shutter dial to "B". Thereafter, load fresh batteries correctly. (See CAUTION at the top of this chapter.)

[3] Automatic Synchronization

The shutter of OM-2 is of an electric control type for both auto and manual. Whenever the closing curtain has run, MG (magnet) is turned from ON to OFF.

Since the MG takes a coil form, back electromotive force (caused by self-induction) is generated for the change in the current.

This back electromotive force is utilized to control a special electronic flash unit. Both the OM-2 and the special electronic flash unit are provided with an exclusive synch contact in addition to the conventional direct contact.



Auto Sync Contact

Merit: The flash light is measured based on the TTL method to control amounts of light. This assures real time light measurement and offers an ideal type of automatic flash.

{4} Battery Checker (3-level indication)

When the switching lever is pressed to the "CHECK" position (the lever is automatically returned by releasing the finger), the red light-emitting diode provides three indications of ON. BLINK and OFF depending upon battery voltage.

QN ..... Normal (battery voltage 2.75V or higher)

BLINK ..... Better to replace (2.75V ± 0.04V or lower)
(Still provides about 20 rolls of 36-frame film.)

OFF ..... Replace (2.45V ± 0.04V or lower)

{5} Light Measuring Method

The light measurement is performed through two CdSs in the eyepiece section and two SBCs (Silicon Blue Cell) in the mirror box, making a total of four light sensors.

The CdSs in the eyepiece section are connected only to the exposure meter visible in the viewfinder, and plays a role of controlling the pointer of the exposure meter.

The SBCs in the mirror box are used to measure the light at AUTO to control the shutter speed.

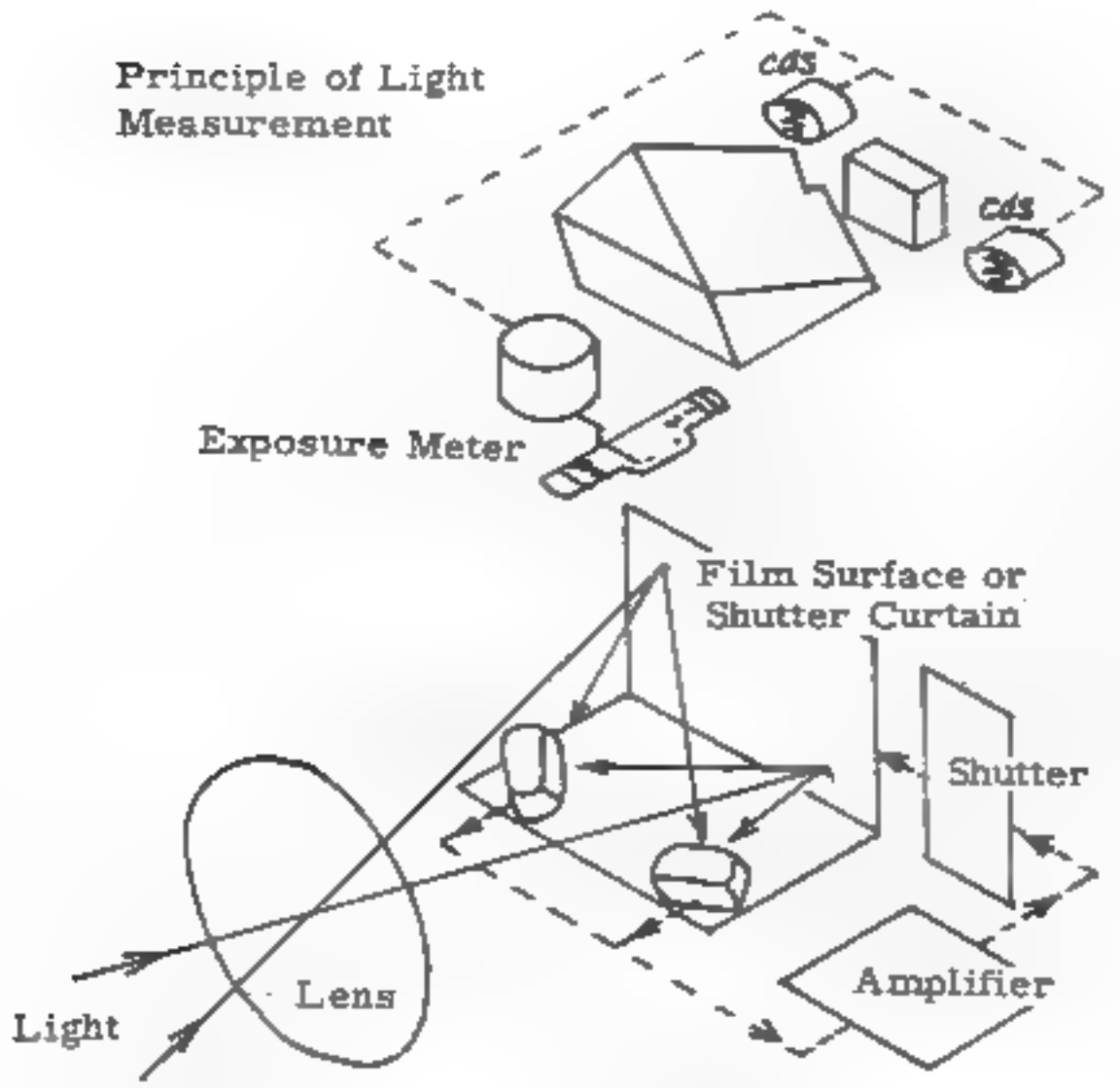
The SBCs face the film plane to measure the reflected light from the film surface (from shutter curtain at high shutter speeds).

Since the SBCs measure substantially the reflected light from the opening curtain at high shutter speeds, the shutter curtain is printed with a "random pattern" designed to achieve correct exposures. (Take care not to leave finger marks, nor smudge the curtain.)

The main switch of the SBCs is turned on when the shutter button is depressed and the mirror is being flipped up. The SBC's quick reaction speed (μ sec order) amply assures the control of shutter speed which is about 1/1000 sec. at the highest.

Therefore, unlike other single-lens reflex cameras with electronic shutter, the conventional memory device is needless; hence, correct exposures can always be obtained even when the subject or scene varies its brightness at the moment of shutter opening.

Principle of Light Measurement



Reflectance variations of various types of film is approximately ±0.3EV.

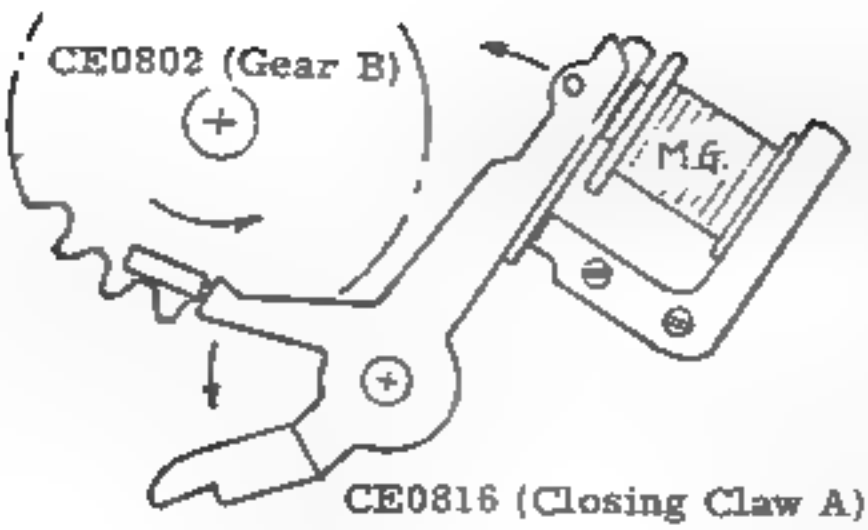
From among a number of patterns, the random pattern was selected which was found to yield best exposures.

[6] Shutter Speed Adjusting Mechanism

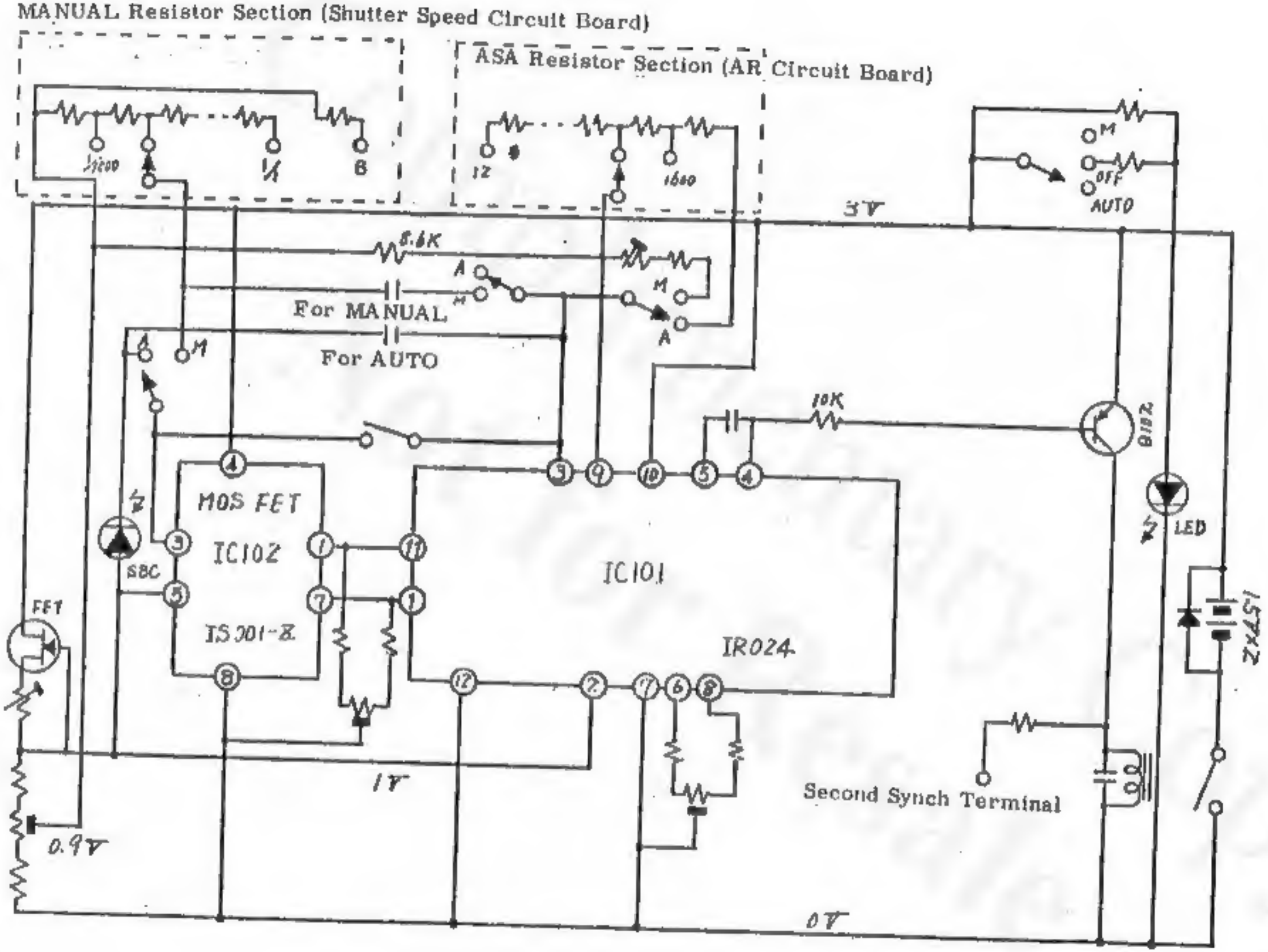
The shutter speed adjustment is done with a mechanical governor in OM-1, but is done with an electric governor (MG + Amplifier) in OM-2. The operation principle of the opening and closing curtains is as follow.

Opening Curtain ... Winding and running are performed with CA8547 (Gear A), same as in OM-1.

Closing Curtain ... The curtain is wound with CE0802 (Gear B), the gear is engaged by MG attractive force and the shutter speed is adjusted by amplifier. The OM-1 governor is replaced by MG and amplifier; others are same as in OM-1.



When MG is turned off, CE0816 (Closing Claw A) is disengaged from CE0802 (Gear B), CE0802 rotates in the arrow direction due to the tension of the closing curtain and the closing curtain starts running.



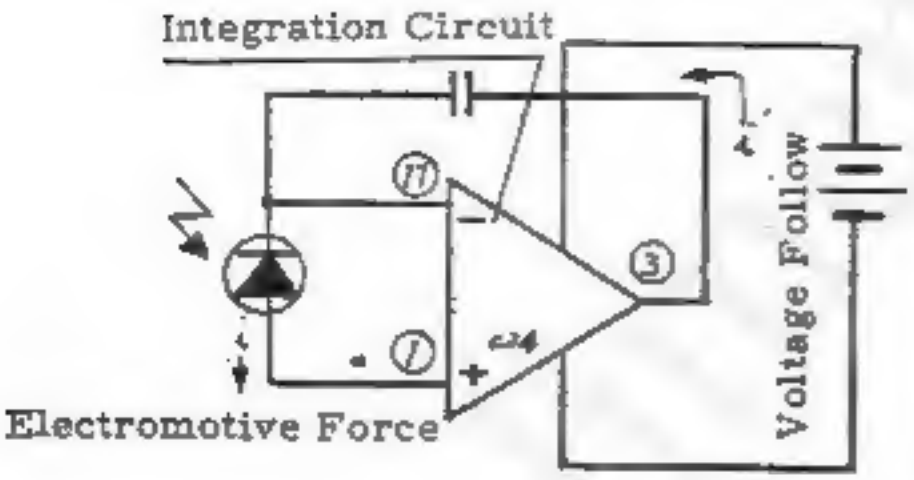
[8] Description of Each Component

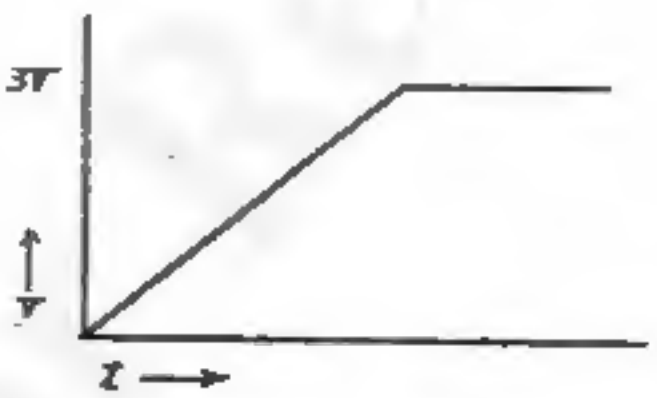
(1) IR 024 (IC 101)

This IC includes four circuits: a) integration circuit, b) comparator, c) sub circuit and d) limiter.

a) Integration Circuit

This is also called an operational circuit. It makes the condenser to charge at a rate such that the relation between charging quantity and time can be expressed in a linear formula (straight line if expressed graphically). (i = i'; if i is constant. i' will also be constant.) When connected as in the illustration below. it acts to flow the current to the output pin ③ so that potential difference between two input pins. ① and ⑪ shall always becomes zero.





Relation between V and t of condenser is expressed by a straight line because of integration circuit.

b) Comparator

This is connected next to the integration circuit. The comparator acts to decide whether the electric signal transmitted has a potential greater than the rated voltage. and switches its output from 0V to 3V if the potential is greater than the rated voltage. The terminals for input electric signal consist of pins ⑨ and ② . while the output terminal of ④ . (As the potential difference of 3V is generated between the base (B) and emitter (E) of the switch transistor Q102 at a 0V output. MG is turned on. When the output is switched to 3V. MG is turned off because potential difference between B and E becomes zero.)

See Shutter Circuit Diagram in the preceding page.

c) Sub circuit

When battery power is depleted. the limiter described below operates to turn off the MG and the shutter is locked. However. if this condition were left as it is. the battery would recover and MG would repeat turning on and off. To prevent this. the sub circuit operates to shunt large current.

d) Limiter

When battery voltage drops below the rated value. the limiter operates to eliminate the potential difference between base and emitter to prevent turning on of MG.

(2). MOS FET (Metal-Oxide-Semiconductor Field-Effect-Transistor)

This is connected between SBC and IC 024. Insulation resistance* on the input side of the integration circuit of IC 024 cannot be made ∞ due to structual reason. Thus. extremely weak currents like SBC's (approx. 10^{-11} A) cannot be dealt with accurately. MOS FET has a very high insulation resistance on its input interface. so that it can accurately catch the extremely weak currents and amplifies and sends them to the integration circuit.

* Correctly. input impedance

MOS FET is destroyed with static electricity of 100V. so must be grounded.

(3) FET

This functions to make flow of electric current constant even when the battery voltage fluctuates. and makes the voltage constant. It is provided with 3 pins: source (S). drain (D) and gate (G). When the voltage between S and G is changed. the current flowing from D to S is changed.

(4) SBC (Silicon Blue Cell)

This is a photo-sensitive element. which generates electromotive force when receiving light.

Features

1. Very quick response speed (10^{-5} - 10^{-6} sec.) enables real time and unremitting light measurement.

2. Dark current is weak and accuracy on the low luminance level is high.

3. Electromotive current caused by incident light changes linearly ($\gamma = 1$).

therefore easy to compute.

4. Blue filter applied lowers the infrared-ray rate to below 14%.

(5) Condenser

This plays an important role of deciding the exposure time. The potential between its electrodes is 0V before charging, and is increased in proportion to charging. When the charging current is large (i.e. when the subject or scene is bright), the voltage increase is rapid. Due to the integration circuit. the relation between the charging voltage increase and time is linear. Two condensers are provided for the following reason. In the AUTO mode. the current to be handled is weak because of SBC. so the condenser capacity is small. Whereas. in the MANUAL mode. the current value is designed large for safety purposes and the condenser capacity is made larger.

Condenser for AUTO ..... 470 pF

Condenser for MANUAL ..... 22000 pF

In addition to the above. two condensers are used; one for the prevention of comparator oscillation and the other for voltage adjustment of second synchro circuit.

(6) LED (Light-Emitting Diode)

When the shutter is released in a dark place. the LED (positioned underneath SBC) illuminates the SBC to prevent the shutter from being left opened.

Connect (+) side to the anode (A) and (-) side to the cathode (K). respectively.

When the AUTO/MANUAL switching lever is set to the OFF position. the LED is lit brightly and the shutter can be released at about 1/15 sec. and faster even at OFF.

(7) Diode

This is connected in the shortest distance between the batteries to prevent current flow when batteries are loaded upside down.

(8) Transistor

The transistor used in the M circuit board is for turning on and off of the magnet.